THE OFFICE OF THE STATE CHIEF INFORMATION OFFICER
ENTERPRISE TECHNOLOGY STRATEGIES

North Carolina Statewide Technical Architecture

Implementation Guidelines:

Enterprise Management

Implementation Guidelines: Enterprise Management

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Introduction

T he intent of this document is to provide general implementation guidelines within the Enterprise Management Domain. This will help to ensure that the State of North Carolina adopts uniform and consistent implementations of enterprise management solutions across the enterprise.

The key goal of this document is to outline implementation guidelines that, when followed by the solution developers, will lead to a well-designed data solution that has the flexibility to grow with changes in technology and can be maintained in an efficient and effective manner, which is a fundamental principle of the North Carolina Statewide Technical Architecture.

This implementation guild is currently being revised both to better reflect the state of technology and improve upon existing architectural guidelines to better support state agency initiatives.

Implementation Guidelines

Implementation Guidelines for Help Desk Services

Guideline 1: Consolidate help desk services when common functions are being supported across business units.

Rationale

- Support resources can be leveraged more effectively when support for common functions are consolidated.

Guideline 2: Link support functions together electronically.

Rationale

- Service requests or problems often begin with an initial desk and require the services of another help desk. Support hand-offs and tracking are made more effective when linked electronically.

Guideline 3: Provide a single point of entry per constituency.
Rationale

- A single point of entry function, responsible for resolving customer needs and routing cases to the appropriate function, reduces customer issues associated with locating and obtaining support.

Guideline 4: Identify common data elements. Enable electronic interchange of problem and solution information.

Rationale

- Common data elements facilitate the electronic interchange of problem and solution information because translation of data definitions is not required and information can be more easily re-used.

Implementation Guidelines for Help Desk

Avoid New Deployment Migrate From Technology	Current Technology Direction	Emerging Technology
Local help desk units using a variety of configurations and applications.	Consolidate help desk services. Standardize service delivery using client/server based applications.	Full-service web-based client support.
Little communications between help desk units.	Identify Help Desk units and define electronic communication mechanisms between help desk units.	Statewide Web based request and email routing to appropriate service resource.
Service requester has difficulty locating appropriate support resource.	Provide a single point of contact to the user per constituency. (Each level 1 help desk has one contact number. A statewide `800' number routes requests to the appropriate help desk unit).	Web based request entry to a single email address or location.
Redundant entry of client and resolution data each time a problem occurs.	Identify common data elements. Enable electronic interchange of problem and solution information.	Solution-centered support. Use federated data for all common data elements. (See the Data Architecture Chapter)

Table 1- Help Desk Implementation Guideline Summary

Implementation Guidelines for Systems Management

Guideline 1: Centralize remote systems management for mission critical applications

Rationale

- Systems management components are infrastructure and can be leveraged to provide common functionality to multiple business functions.

Guideline 2: Implement products that use standard protocols and interfaces.

Rationale

- Use of standard protocols and interfaces promotes interoperability among management products and can reduce required core management infrastructure e.g., management consoles and products.
- Will simplify efforts required to properly secure system management functions.

Guideline 3: Use integrated management suites. Use best-of-breed point products when the integrated management suite cannot substantially meet the business requirements.

Rationale

- Use of integrated tools reduces the costs associated with implementation and support. Common methods and procedures are used for bringing managed objects into the management framework and for ongoing management of these objects.

Guideline 4: Use a Relational Database Management System (RDBMS) as the underlying store for managed objects, policies, events, and alerts.

Rationale

- Use of an RDBMS facilitates access to management data for functions beyond those provided by the management framework e.g., query and reporting tools.

Implementation Guidelines for Systems Management

Avoid New Deployment Migrate From Technology	Current Technology Direction	Emerging Technology
Local units managing their own mission critical applications and devices on site.	Centralization with remote systems management for mission critical applications.	Full-service centrally managed networks, Virtual Data Centers.
Use of proprietary products.	Standardize operations based on SNMP, RMON, DMI compliant products.	Some management functions performed on the WEB.
Non-integrated point products used for each specific systems management function.	Use of integrated suites of management products to perform groups of systems management tasks. Some best-of- breed point products.	`Plug and play' technology that supports standards that facilitate integration of systems management products from different vendors into operations.
Proprietary management information databases.	RDBMS management information databases.	ODBMS management information databases.

Table 2 - Systems management operational implementation guideline summary